

WHAT IS CLAIMED IS:

1. An application management system comprising :
 - a plurality of controlled devices; and
 - an application server performing the installation and management of applications for the plurality of the controlled devices by using a framework capable of providing integrated support to a variety of home network middleware.
2. The application management system as claimed in claim 1, wherein the home network middleware is selected from a group consisting of HAVi, UPnP, Jini and HWW.
3. The application management system as claimed in claim 1, wherein the framework is an OSGi framework.
4. The application management system as claimed in claim 1, wherein each of the controlled devices includes a home network middleware module for communicating with the application server.
5. The application management system as claimed in claim 1,

wherein each of the controlled devices includes positional information on an application file to be installed, and the application file is stored in a file server on the Internet.

6. The application management system as claimed in claim 5, wherein the application server extracts the positional information on the application file from the controlled devices and downloads the application file from the file server to install a relevant application in response to the extracted positional information.

7. The application management system as claimed in claim 5, wherein the application server includes a home network middleware module for communicating with the controlled devices and extracting the positional information on the application file from the controlled devices, an application loader module for downloading the application file from the file server in accordance with the extracted positional information on the application file, and an application management module for controlling operations of the home network middleware module and the application loader module.

8. The application management system as claimed in claim 7, wherein the home network middleware module and the application loader

module are bundled into the framework.

9. An application management system comprising a plurality of controlled devices and an application server, wherein:

a framework capable of providing integrated support to a variety of home network middleware is loaded on the application server; and

each of the controlled devices controls the application server and performs installation and management of applications for the controlled devices.

10. The application management system as claimed in claim 9, wherein the home network middleware is selected from a group consisting of HAVi, UPnP, Jini and HWW.

11. The application management system as claimed in claim 9, wherein the framework is an OSGi framework.

12. The application management system as claimed in claim 9, wherein an application file is stored in a file server on the Internet.

13. The application management system as claimed in claim 12, wherein the application server includes a home network middleware module for communicating with the controlled devices, an application loader module for downloading the application files from the file server under the control of the controlled device, and an application platform service module for controlling operations of the home network middleware module and the application loader module under the control of the controlled device.

14. The application management system as claimed in claim 13, wherein the home network middleware module and the application loader module of the application server are bundled into the framework.

15. The application management system as claimed in claim 9, wherein each of the controlled devices includes a home network middleware module for communicating with the application server, and an application management module for installing a new application or managing an already installed application by controlling the application server.

16. The application management system as claimed in claim 15, wherein the application management module determines a location where a

new application file is downloaded and then requests the application server to install the new application.

17. A method for managing an application using an application management system including a plurality of controlled devices and an application server, comprising the steps of:

- (1) detecting connection of the controlled devices with a home network by an application server loaded with a framework capable of providing integrated support to a variety of home network middleware; and
- (2) installing the application necessary for controlling the controlled devices by the application server.

18. The method as claimed in claim 17, wherein the home network middleware is selected from a group consisting of HAVi, UPnP, Jini and HWW.

19. The method as claimed in claim 17, wherein the framework is an OSGi framework.

20. The method as claimed in claim 17, wherein the framework provides Internet access services and home network middleware services.

21. The method as claimed in claim 17, wherein step (1) comprises the steps of:

extracting positional information on an application file necessary for controlling the controlled devices, by the application server;

downloading the application file from the file server in accordance with the extracted positional information by the application server; and

executing the downloaded application file and installing a relevant application by the application server.

22. The method as claimed in claim 21, wherein each of the controlled devices includes the positional information on the application file, and the application file is stored in a file server on the Internet.

23. The method as claimed in claim 17, further comprising an application management step of executing, stopping, deleting, and updating the application installed in the application server.

24. A method for managing an application using an application management system including a plurality of controlled devices and an application server, comprising the steps of:

(1) searching for the application server with an application platform

service module, by the controlled device; and

(2) controlling the application server to install the application for the controlled devices, by the controlled device.

25. The method as claimed in claim 24, wherein the application server is loaded with a framework capable of providing integrated support to a variety of home network middleware.

26. The method as claimed in claim 25, wherein the home network middleware is selected from a group consisting of HAVi, UPnP, Jini and HWW.

27. The method as claimed in claim 25, wherein the framework is an OSGi framework.

28. The method as claimed in claim 25, wherein the framework provides controlled device access services and home network middleware services.

29. The method as claimed in claim 24, wherein step (2) comprises the steps of:

determining whether it is necessary to install a new application, by the controlled device;

if it is necessary to install the new application, requesting the application server to install the new application, by the controlled device;

downloading a relevant application file from a file server according to the request for installing the new application; and

controlling the application server to install the new application, by the controlled device.

30. The method as claimed in claim 24, further comprising an application management step of executing, stopping, deleting, and updating the application installed in the application server.